Book-to-Market, Size and Momentum Factors in Market-Timing Models: The Case of the Polish Emerging Market

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Abstract

The main goal of this paper is to present modified multifactor extensions of classical market-timing models, with Fama and French's spread variables *SMB* and *HML*, and Carhart's momentum factor *WML*, on the Polish emerging market[1]. The empirical results on the Warsaw Stock Exchange (WSE) show a pronounced Fisher's effect in the case of the main WSE indexes. For this reason, we include lagged values of the market factor as an additional independent variable in the regressions of market-timing models. The market-timing and selectivity abilities of fund managers are evaluated for the period January 2003 to December 2010. We test a group of selected Polish equity open-end mutual funds. We compare the seemingly unrelated regression (SUR) and the Newey-West method (HAC) results of the models and investigate their statistical properties.

JEL classification codes: C1, C33, G1, G2
Keywords: mutual funds, market-timing, size, book-to-market, momentum, nonsynchronous trading, SUR method

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[1] *SMB* stands for "small (market capitalisation) minus big", *HML* for "high (book-to-market ratio) minus low" and *WML* for "winners minus losers"